



CITY OF LODI

COUNCIL COMMUNICATION

AGENDA TITLE: Professional Services Contract with Resource Management International, Inc. (RMI) for Electric Distribution System Assistance (\$121,000)

MEETING DATE: September 15, 1999

PREPARED BY: Electric Utility Director

RECOMMENDED ACTION: That the City Council authorize the City Manager to execute a professional services contract with RMI for Electric Distribution Assistance not to exceed \$121,000.

BACKGROUND INFORMATION: In order to best be prepared to compete in the future marketplace, the Department has continued to review its day-to-day operations as it developed the recently completed financial plan. These reviews of electric distribution system maintenance and operation activities and associated procedures are intended to ensure that electric utility industry "best practices" are being utilized.

As part of the current review cycle, the Department has identified the following areas for which more detailed audits are recommended:

1. Maintenance Program Development;
2. Operations Programs Development/Safe Clearance Procedures;
3. Technical Services Staffing Review;
4. Drawing Accuracy Process Review;
5. Training Program Development;
6. Parts Inventory Program;
7. Station Security Review;
8. Year 2000 Preparedness; and
9. Integration of Related Utility Duties

RMI has developed a proposal (attached) addressing the work that needs be done in order to accomplish the above tasks. A four-month long project timeline is envisioned. This outside review will help identify and address any deficiencies in our current operations and insure future efforts and expenditures are devoted to the most important areas.

FUNDING: Policy, Legislative & Regulatory 160601.7323: \$121,000

FUNDING AVAILABLE: Vicky McAthie
Vicky McAthie, Finance Director

Alan N. Vallow
Alan N. Vallow
Electric Utility Director

APPROVED:

H. Dixon Flynn
H. Dixon Flynn -- City Manager



CITY OF LODI

COUNCIL COMMUNICATION

PREPARED BY: John Stone, Manager, Business Planning and Marketing

ANV/JS/lst

C: City Attorney

APPROVED: _____
H. Dixon Flynn -- City Manager

ELECTRICAL DISTRIBUTION ASSISTANCE

FOR

CITY OF LODI ELECTRIC DEPARTMENT

Prepared For

CITY OF LODI

UNPUBLISHED WORK © JULY 1999

RMI

RESOURCE MANAGEMENT
INTERNATIONAL, INC.



RESOURCE MANAGEMENT
INTERNATIONAL, INC.

July 9, 1999

Mr. Alan Vallow
Electric Utility Director
City of Lodi- Electric Utility Department
1331 South Ham Lane
Lodi, California 95242

Subject: Electrical Distribution Assistance Proposal

Dear Alan:

Resource Management International, Inc. (RMI) is pleased to submit its proposal to provide assistance to the City of Lodi Electric Utility Department (Lodi Electric) in addressing certain electrical distribution matters. Since 1980, when RMI was formed, it has been providing technical and managerial support to electric utilities throughout the United States. Many of these assignments were undertaken for various Northern California utilities and concerned issues similar to those identified by Lodi Electric.

It is noteworthy that Lodi Electric is continuing to devote management time and employee resources to maintaining its electric distribution system during a period of time when many other electric utilities are only focused on power supply. While undertaking this distribution work, Lodi Electric has identified certain activities associated with substation facilities for which outside assistance may be desired. Both Mr. John Forman and I had the opportunity to meet with Lodi Electric employees and visit each of Lodi Electric's substation facilities. As a result of having spent the greater part of a day with members of your staff, RMI believes it was able to develop a strong understanding of Lodi Electric's operation and maintenance objectives and needs.

RMI has structured its proposal as several distinct tasks. Each task can be undertaken separately or combined into a comprehensive work package. The nine tasks are collectively referred to as the "Project" in the proposal, and primarily focus on the work generally performed by Lodi Electric's Technical Services Division.

The qualifications of RMI Project Team members and the roles they will have in the Project are described in detail in the enclosed proposal. The Project Team can provide Lodi Electric with a full range of support and assistance to complete the defined tasks.

RMI places strong emphasis on working in tandem with its clients, stressing cooperation and consultation. We welcome your consideration of RMI's proposal and



Alan Vallow

July 9, 1999

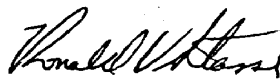
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are confident that you will conclude that RMI is well qualified to conduct this assignment for the following reasons:

- *RMI has assembled a Project Team with unparalleled hands-on experience in electric substation work, as well as electric distribution in general.* RMI's Project Team consists of professionals who have held management positions with both investor owned and municipal electric utilities. Their knowledge of distribution systems and practices is based upon years of both engineering and field experience. In particular, the Project Team consists of members whose background includes experience in working with the same voltage classes that are on the Lodi Electric system.
- *RMI can provide Lodi Electric with a full range of support and assistance in addressing the full complement of proposed tasks.* RMI's Project Team has the requisite background and experience to address the technical issues as well as the organizational matters that Lodi Electric may wish to consider. Tasks which require field experience will be staffed by personnel with journeyman electrician experience when appropriate.
- *RMI's headquarters office is close by and provides easy accessibility.* RMI proposes to manage this assignment from its nearby Sacramento office. Since most of RMI's distribution and transmission specialists work out of Sacramento, specialized assistance, if and when needed, can be provided quickly and cost effectively.
- *RMI has made a corporate commitment to provide Lodi Electric with exceptional consulting services.* RMI realizes the importance of this assignment to Lodi Electric and has made a corporate commitment to provide exceptional consulting services. The proposal includes the use of senior level consultants who will commit the time necessary to complete the assignment successfully.

Thank you for the opportunity to present this proposal and demonstrate RMI's qualifications to assist Lodi Electric. We look forward to working with you on this important and interesting activity. Please call me at 818-244-0117, or E-mail me (ron_stassi@rmiinc.com) if you have any questions regarding this proposal or RMI's capabilities.

Sincerely,



Ronald V. Stassi
Managing Director

cc: Mel Grandi

RMI

RESOURCE MANAGEMENT
INTERNATIONAL, INC.



ELECTRICAL DISTRIBUTION ASSISTANCE

FOR

CITY OF LODI ELECTRIC DEPARTMENT

Prepared For

CITY OF LODI

Prepared By

RMI

**RESOURCE MANAGEMENT
INTERNATIONAL, INC.**

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SECTION 1

PROJECT OVERVIEW

Beginning in 1910 electricity for businesses and residents of the City of Lodi has been provided by Lodi Electric, the City's customer owned electric system. City employees working under the electric Utility Director are responsible for the transmission and distribution functions associated with the safe and reliable delivery of electricity. Like many other municipal electric utilities in the United States, most of the workforce is assigned to electric distribution. Incoming power is received from three 60,000 volt lines interconnected with Pacific Gas and Electric. As the power moves through the distribution system, it is transformed down to utilization voltages and distributed to individual customers in accordance with their individual service requirements.

Although California Assembly Bill 1890 (AB 1890) enacted in September, 1996 is dramatically altering most of the electric utility industry, its provisions generally leave electric distribution unchanged. While addressing the challenges presented by AB 1890, Lodi Electric is wisely continuing to devote management time and internal resources to maintaining its electric distribution system. While undertaking this ongoing activity, Lodi Electric has identified some activities associated with its distribution system for which outside consulting assistance may be desired. Subsequently, personnel from Resource Management International, Inc. (RMI) met with Lodi Electric personnel to discuss how to best address Lodi Electric's concerns. This was followed up with an on-site inspection of key facilities. As a result of those activities, RMI has prepared a proposed scope of work to assist Lodi Electric in meeting its electric distribution system objectives. The proposed work has been divided into nine distinct tasks which are collectively referred to as the "Project."

Project work centers around those duties and assignments of the Technical Services Division, and is primarily related to substation activities. Lodi Electric owns, maintains and operates four substations which transmit and distribute power through a looped 60,000 volt network. RMI believes its assistance will be helpful to Lodi Electric in addressing a variety of technical issues related to these particular facilities.

RMI's proposed Project Team brings a combination of experience, expertise, and knowledge to assist Lodi Electric in addressing its defined distribution system needs. RMI proposes to work closely with Lodi Electric personnel to ensure that the task assignments proposed in Section 2 - Work Scope, are completed to Lodi Electric's satisfaction.

Resource Management International, Inc. (RMI) is pleased to present its proposed Work Scope. The tasks are presented as individual unique activities that can be authorized by Lodi Electric as either individual task assignments or as a comprehensive package. The comprehensive approach reflects RMI's attempt to construct a proposal that addresses those needed activities which have been identified through both past discussion with Lodi Electric personnel and a visit to substation facilities. The Work Scope identified is almost totally related to that portion of the operations of Lodi Electric which fall within the duties performed by the Technical Services section. Technical Services has the responsibility for substation maintenance, testing and construction.

The identified tasks for the Project have been categorized into the following nine distinct tasks:

Task 1- Maintenance Program Development

Although Lodi Electric's substation equipment is generally being maintained in a manner consistent with utility practice, a well documented master maintenance plan and schedule is needed. Such a plan along with the appropriate use of test and maintenance results will ensure greater safety and reliability of operations. The written maintenance manual prepared by RMI will specifically address the type of equipment utilized at Lodi Electric as well as its operating history.

Task 2- Operations Program Development/Safe Clearance Procedures

Clear and easy to understand operating procedures for both normal and emergency conditions are critical from the perspective of personnel safety as well as that of prompt service restoration. Many operating procedures require the need to work with energized equipment. This is often further complicated by the need to coordinate switching activities in real time with personnel that may be at remote facilities. Proper clearance procedures need to be developed in order to ensure that switching procedures and maintenance clearances are undertaken safely. RMI will review and refine

switching and clearance procedures at Lodi Electric and develop programs to address various operating situations.

Task 3- Technical Services Staffing Review

The authorized staffing for the Technical Services Section consists of one Technical Services Manager, two Electrical Technicians, and two Electricians. At present, the Technical Services Manager position is vacant, and being filled on a temporary basis by one of the Electrical Technicians. The vacancy presents an unique opportunity to consider whether or not the present compliment of titles and number of positions provides Lodi Electric with the optimal staffing mix.

Task 4- Drawing Accuracy Process Review

Lodi Electric is interested in having independent field checks conducted to ascertain if equipment and devices are wired in accordance with the drawings. Additionally, there is a need to determine if the drawings are in accordance with the manufacturers' wiring instructions. RMI proposes to "troubleshoot" the wiring circuits and determine if the drawings are in compliance with existing field conditions and consistent with the manufacturers' recommendations. This work will be accomplished by utilizing RMI's own skilled electricians and testers on site.

Task 5- Training Program Development

Technical training for skilled employees should be an on-going activity. It is important to have both new product and refresher oriented training activities. Although not the case at Lodi Electric, oftentimes training will be implemented in a haphazard fashion, rather than through a well thought out approach. RMI's experience in defining training needs has shown that employee input is a key determinant in the successful development of a training program. Employees often have the best insight into training needs as a result of dealing with equipment on a regular basis.

Task 6- Parts Inventory Program

Maintaining a proper and accessible inventory of spare parts is critical. Additionally, employees must have confidence in knowing that replacement parts/equipment remain secure and undamaged.

Security, shelf life and accessibility of parts all play a role in employee acceptance of any parts inventory management system. RMI's approach to managing spare parts inventories is to analyze need, develop inventory, ensure availability and awareness, and establish employee confidence in the system.

Task 7- Station Security Review

Security of substation facilities is critical because of the large concentration of capital investment at such sites. Lodi Electric operates its four substation facilities unstaffed, however, RMI has found a combination of various security measures implemented in an overlapping fashion can generally provide a relatively high degree of security. Interviews with local police personnel can often uncover security issues that are unique to a particular community.

Task 8- Year 2000 Preparedness

Concern exists over whether utility equipment and related subsystems are Y2K compliant. Compliance is determined in a number of ways which include manufacturer certification, accelerated time testing, and replacement of suspect devices. RMI utilizes these tools as well as many others to identify compliance issues associated with critical systems.

Task 9- Integration of Related Utility Duties

Recognizing that the Technical Services Division works closely with both the Service Troubleshooting and Utility Operations Divisions, certain activities are best approached on an integrated basis. Duties of the Technical Services Division which overlap or impact the duties of these or other Divisions will be identified and integrated into RMI's analyses.

For each of these defined tasks, RMI has identified the following activities and work elements to be critical to the development of a professional work product:

1. **Substation Maintenance Program Development**
 - A. Interview maintenance personnel
 - B. Obtain maintenance records
 - C. Obtain maintenance manuals for equipment
 - D. Revise and modify maintenance plan
 - E. Revise and modify maintenance schedule
 - F. Draft updated Maintenance Program/Review with maintenance personnel
 - G. Prepare final Maintenance Program

2. **Operations Program Development/Safe Clearance Procedures**
 - A. Interview operations and maintenance personnel
 - B. Obtain operations procedures
 - C. Review and modify operations program including safe clearance procedures
 - D. Draft updated Operations Program
 - E. Prepare final Operations Program

3. **Technical Services Staffing Review**
 - A. Interview Technical Services Personnel
 - B. Interview management personnel
 - C. Interview Human Resources personnel
 - D. Determine key Intradepartmental working relationships
 - E. Assess capabilities of staff
 - F. Develop staffing plan
 - G. Draft staffing study
 - H. Prepare final staffing study

4. **Drawing Accuracy Process Review**
 - A. Interview engineering department personnel

- B. Interview maintenance department personnel
- C. Obtain and review existing drawing procedures
- D. Conduct field inspections and wiring verifications
- E. Draft revised drawing revision procedures
- F. Prepare final drawing revision policy

5. Training Program Development

- A. Interview division personnel
- B. Assess adequacy of present staff training
- C. Assess training needs
- D. Develop training program goals
- E. Develop training needs
- F. Draft Training Plan
- G. Prepare final Training Plan

6. Parts Inventory Program

- A. Assess availability and location of spare parts and replacement equipment
- B. Analyze needs for spare parts and identify replacement equipment events
- C. Develop inventory requirements
- D. Draft spare parts and replacement equipment storage and availability plan
- E. Prepare final Parts and Equipment Inventory Program

7. Station Security Review

- A. Interview personnel regarding present station security program
- B. Interview police personnel
- C. Obtain existing policy for station security
- D. Develop draft station security policy
- E. Prepare final Station Security Policy

8. **Year 2000 Preparedness**
 - A. Assess Y2K preparedness status
 - B. Define standby preparedness issues
 - C. Develop staffing plan and associated assignments
 - D. Draft Y2K Contingency Plan
 - E. Prepare final Contingency Plan

9. **Integration of Related Utility Duties**
 - A. Include the Task 2 (Operations/Clearances) activities for Service Troubleshooting and Utility Operations Divisions
 - B. Include the Task 5 (Training) activities for the Service Troubleshooting and Utility Operations Divisions
 - C. Identify cross-training opportunities among the Technical Services, Service Troubleshooting, and Utility Operations.

SECTION 3

QUALIFICATIONS & EXPERIENCE

RMI has been providing technical and managerial consulting services to clients in the energy field since 1980. RMI has approximately 170 on-staff consultants and supporting staff in 14 offices throughout the world, and a substantial pool of other professionals under contract with the necessary skills and experience to meet the Lodi Electric's needs. RMI is headquartered in nearby Sacramento, California. It is presently helping a number of cities, utilities, and other clients in Northern California as well as throughout the United States. Recently, it has developed comprehensive plans and strategies so that its clients can effectively compete in a changing electric utility environment. RMI places a strong emphasis on working in tandem with its clients, stressing cooperation and consultation.

Over the years, RMI has developed extensive experience, capability and knowledge in the area of electric utility distribution. RMI's professional staff has a keen understanding of the need to provide a balanced assessment of technical, financial and workforce-related factors that enter into operational considerations. Besides providing technical and managerial assistance over the years, RMI through its Utility Services Division, provides electrical crafts personnel to maintain an electric distribution system for a California utility. This places RMI in the unique position of possessing expertise in the "hands on" side of the electric distribution business.

The project will be staffed by personnel from RMI's two California offices located in nearby Sacramento and in Glendale. Should special expertise be required that could better be provided by personnel from one of RMI's other offices, RMI will not hesitate to make that expertise available to this assignment.

RMI has performed many assignments similar to those described in this proposal. A representative listing of these assignments follows:

Electric Maintenance Services- City of Vernon, 1988-Present

For over ten years RMI has maintained the electric distribution system for the City of Vernon, California. Beginning in 1988, when RMI managed the changeover of the distribution maintenance function from a local investor owned utility through to the present, RMI has

maintained the Vernon electric system under a long-term contractual relationship. This contract was just recently renewed for an approximate ten year period. RMI provides the skilled staff and management personnel to provide needed maintenance, including trouble shooting, 24-hours a day, 365-days a year, working effectively with Vernon's operating staff.

Electric Operations and Maintenance Management- City of Needles, 1989-1991

RMI provided project management and overall coordination for the implementation of an electric operations and maintenance program for the City of Needles, California. RMI was responsible for recruiting the manager and staff, acquiring operating equipment and vehicles, budget development, facilities design, and developing policies and procedures, as well as managing the utility during the start up phase of operation.

Maintenance Manual Development- City of Burbank, 1991

Although the City of Burbank's electric utility equipment was generally being maintained in a manner consistent with utility practice, there was no management documentation of the activities. RMI was charged with developing a written maintenance manual specifically customized for Burbank, California's electric system. Preventative maintenance procedures were developed for 18 individual program elements, including several in the substation equipment area. The end result was the development of computer based comprehensive maintenance procedures designed to address all electric equipment maintenance requirements.

Distribution System Renovation- City of Henderson, Nevada, 1994

Assisted in planning the renovation and rebuild of a 13.8 kV distribution system serving the Basic Management Industries Complex in Henderson, Nevada. This distribution system provides 200 MW of industrial load, features three 13.8 kV to 4.16 kV substations, and includes both overhead and underground facilities, and extensively utilizes outdoor metal clad switchgear.

SECTION 4

PROJECT TEAM

RMI's Project Team will be staffed by personnel from its two California offices located in nearby Sacramento and Glendale. Should special expertise be required that could better be provided by personnel from one of RMI's other offices, RMI would not hesitate to make that expertise available for this assignment.

Mr. John Forman, vice-president of RMI and president of RMI Utility Services (RMIUS), will provide upper management oversight for the Project. Mr. Forman has been with RMI for over thirteen years, during which time he has been the project managing director for the California-Oregon Transmission Project, and a project engineer on Westley-Tracy 230 kV Project for Modesto and Turlock Irrigation Districts. Mr. Forman has provided management assistance to the Transmission Agency of Northern California, of which Lodi is a member. Mr. Forman has previously worked for both the Western Area Power Administration and the United States Bureau of Reclamation in the management of the operation, maintenance and construction of the federal power system in California, Nevada and Arizona. Most all of his career has been spent in transmission and distribution related activities. He is currently managing the contract services that are provided by RMIUS for the City of Vernon, California, where a staff of 12 is providing maintenance services to Vernon on its transmission and distribution systems.

Mr. Ronald Stassi will serve as Project Manager. Mr. Stassi has garnered many years of distribution system experience as it relates to lines, substations, protection practices, and electric equipment. He also brings a strong municipal utility management perspective to the Project having had management responsibility for electric crafts personnel. Additionally, because he has extensive experience in dealing directly with Utility Boards and union representatives, he understands the need to include Lodi Electric personnel as active participants throughout the process.

Mr. Dan McEntire, RMIUS Division Manager for the Vernon Contract Services, will provide his O&M experience to assist the project as required. Mr. McEntire has spent his entire career in the electric utility construction, operation and maintenance fields, and will be a valuable resource to the successful completion of the Lodi Electric Project.

It is anticipated that Mr. Forman and Mr. Stassi will be responsible for performing approximately 80% of the work, with the balance requiring expertise provided by Mr. McEntire and other members of RMI's professional staff.

Resumes for RMI's Project Team are shown in the Appendix.

JOHN S. FORMAN

John Forman is a vice president of RMI and an accomplished professional electric engineer with over 36 years of experience in power system planning and analysis. His expertise spans feasibility assessments, system studies, design, construction, and the operations and maintenance of transmission and distribution facilities ranging up to 500-kV, including both AC and DC and underground applications. A highly effective project manager, Mr. Forman was responsible for the successful start-up of several municipal electric utility operations. He oversaw the equally successful development of the high-profile 500-kV California-Oregon Transmission Project as well as numerous other transmission facilities in the western United States. He was also instrumental in the effective planning, construction and start-up of the renovated 13.8-kV distribution system serving a complex of industrial facilities in Nevada. Prior to his affiliation with RMI, Mr. Forman had spent much of his professional career with the U.S. Bureau of Reclamation and the Western Area Power Administration where he achieved recognition as the deputy area manager of the Boulder City office of the federal power marketing agency.

EDUCATION

B.S. - Electrical Engineering
University of Kansas, Lawrence

PROFESSIONAL HISTORY

Resource Management International, Inc.
Vice President

RMI Utility Services
President

Western Area Power Administration
Deputy Area Manager
Assistant Area Manager, Engineering, Operations and Maintenance

U.S. Bureau of Reclamation
Chief, Power Division, Central Valley Project
Successively More Responsible Positions with USBR

Kansas Power & Light Company
Division Engineer

REPRESENTATIVE PROJECT EXPERIENCE

As project manager, performed a wide range of system studies to help the Western Area Power Administration effectively plan new transmission facilities to serve six pumping plants on the Tucson Aqueduct of the Central Arizona Project. Based on analysis, recommended development of a 115-kV system to deliver power to the pumping plants. The study plan called for construction of a new switching station (Rattlesnake) on the Marana-Tucson transmission line and construction of several pumping plant substations on a new line that would connect to the Bel Bac switching station on the Tucson-Nogales transmission line.

As project managing director, was responsible for a wide range of system planning analyses to support development of the California-Oregon Transmission Project.

**REPRESENTATIVE
PROJECT
EXPERIENCE**

The 340-mile long, 500-kV transmission system was developed by a consortium of municipal utilities under the leadership of the Transmission Agency of Northern California and with the support of the Western Area Power Administration for the purpose of linking the generating facilities of California with those of the Pacific Northwest.

Verified power flow, stability, fault duty, facility and equipment requirements, and remedial action schemes. Coordinated planning process with all participating utilities and the architect/engineer under contract. Oversaw preparation and issuance of material specifications (e.g., stub angles, tower steel, shield wire, conductor, insulators, and hardware) and construction specifications, bid receipt and analysis, award of supply and construction contracts, and receipt and payment of services.

As project managing director, oversee a wide range of operating transfer capability studies in support of California-Oregon Transmission Project (COTP) operations. The 340-mile long line is one of three 500-kV AC lines, referred to as the California-Oregon Interties, that link the electric systems of California with those of the Pacific Northwest. A series of power flow, stability and outage studies are conducted seasonally to facilitate the coordinated operation of the COTP with the overall regional power grid. The studies are performed seasonally in view of two 1996 power outages in the Pacific Northwest that cascaded into an outage of the California system.

As project managing director, directed the planning process for the Adelanto-Lugo Transmission Project for a group of electric utilities in California. The 20-mile long, 500-kV was designed to link the Adelanto and Lugo substations in the High Desert just outside of Los Angeles. Conducted a needs assessment; developed work plan, budget, and critical-path schedule; oversaw siting analysis, evaluation of alternative configurations and technical requirements; and developed a rated transfer capability for the line in compliance with Western Systems Coordinating Council guidelines.

Prepared power availability studies and power marketing criteria for the Boulder City office of the Western Area Power Administration. The study results were used to develop and negotiate power marketing and facility use contracts with the federal agency's wholesale energy customers.

Participated in power sales contract negotiations with U.S. Bureau of Reclamation power customers seeking additional seasonal energy as a result of increases in water supply. The energy was offered to preference customers on a pro-rata basis.

As area manager with Western Area Power Administration, assisted Boulder City, Nevada, in developing a resource plan to meet the city's growing demands for electricity. Prepared a report on the city's projected load and resources required to meet the projected load. The report also included the benefits the city could achieve through power pooling with other Western customers in

the southern Nevada area.

As project manager, oversaw system planning, environmental analyses, design and construction of transmission system additions to serve the Salt Gila pumping plant on the Central Arizona Project. A 230-kV substation (Spook Hill) and a 69-kV transmission line (Spook Hill-Salt Gila) were built to serve the pumping plant.

As deputy area manager for the Western Area Power Administration, directed the planning and development of a 230-kV transmission line linking the Liberty substation to the Coolidge substation in central Arizona. Oversaw environmental studies and site analysis, land acquisition, design and the preparation of specifications for the 70-mile long transmission link, 55 miles of which ran through the Gila River Indian Reservation. The project required removal of an existing line located in sensitive tribal areas.

As project manager, oversaw environmental studies, system design, and specification preparation for reconductoring 115-kV transmission lines operated by the Western Area Power Administration in southern Arizona. Used a 795 kcmil self-damping conductor to replace an aging 336 kcmil ACSR to minimize structure replacement while increasing the transfer capacity of the lines.

As project managing director, provided executive oversight of construction of the California-Oregon Transmission Project. The 340-mile long, 500-kV transmission line was placed into commercial operation in 1993 after nearly a decade of detailed planning, study, and public review. Managed team of consultants charged with preparing the design criteria and specifications for clearing vegetation along the route, constructing access roads, and building the transmission system. Oversaw development of the construction schedule and budget, issuance of bid documents, review of bid responses, and award of contracts. Participated in negotiating final contracts and administering those contracts.

As lead engineer, provided a technical review of routing alternatives and recommended a preferred alternative for the 230-kV Westley-Tracy transmission line proposed jointly by the Turlock and Modesto Irrigation Districts in California. The project included construction of a 29.5 mile, single-circuit 230-kV line linking the Westley switchyard and Tracy substation and construction of a 230-kV switchyard, which enabled the two districts to fully use their shares of a 500-kV intertie between California and Oregon. Also prepared a preliminary design for the switching station and specifications for the procurement of steel for the new tower.

As executive-in-charge, provided a water company with turn-key management of a project that called for replacing 69-kV H-frame wood poles with single-shaft corten steel structures. Coordinated environmental surveys to determine suitability of new structure locations, design preparation, construction contract and construction schedule, and appropriate circuit outages to ensure safety during construction. The new steel structures were placed

into service within the approved budget and ahead of schedule.

As project engineer, assisted in planning the renovation of an aging 13.8-kV distribution system serving an industrial complex in Henderson, Nevada. The project design included 25 miles of 13.8-kV underground cable and one mile of 3,000 amp 13.8-kV overhead wood pole line with full redundancy for reliability; upgrades to three 230-13.8-kV substations that provide power to indoor, metal-clad switchgear line-ups located in 13 plants in the complex; and a state-of-the-art supervisory control and data acquisition system that controls 68 circuit breakers, monitors over 1000 status points, and digitally samples voltage and current to provide highly accurate values of harmonics and power flow. The capacity of the electrical distribution system was increased by 100 MVA and operationally provides the improved reliability and power quality demanded by the four industrial companies served by the system. These companies were kept fully operational during construction.

As project manager, oversaw the successful construction of three 13.8-kV power distribution centers as part of a \$15-million renovation of an aging distribution system serving an industrial complex in Henderson, Nevada. Coordinated the awarding of the \$3.8-million construction contract, supervised two field representatives charged with contract administration and quality control, and documented change orders and the installation of all equipment. The project required the installation of 38 13.8-kV circuit breakers contained in metal clad switchgear, three filter capacitor banks, six current limiting reactor banks, 25 miles of power cables in 22 new circuits, four 13.8 to 4.16-kV transformer banks, 11 relay and control panels, and a supervisory control and data acquisition system. Multi-conductor control cables and fiber optic communication circuits were also installed.

As division engineer, designed both overhead and underground primary distribution systems for Kansas Power & Light Company. Prepared specifications for residential distribution systems, substations and street light additions. Designed plans for removing numerous series street light circuits and for converting street lights to individual low voltage operations.

As project engineer, performed an independent engineering review of transmission and distribution system expansion plans proposed by Cleveland Public Power. The review addressed the utility's preferred plans and equipment parameters, schedule, cost estimates, and budget. The results of the review were presented in a consultant's report in support of a \$58 million sale of Bond Anticipation Notes and a subsequent \$225 million sale of long-term bonds to finance the facility additions.

As area manager, managed construction of numerous power facilities for the Boulder City area office of Western Area Power Administration. Developed design criteria and specifications for distribution facilities, substations, transmission lines and communication facilities. Prepared the point list for a new

Supervisory Control and Data Acquisition (SCADA) system installed in a power system dispatch center and oversaw the installation of transducers, interposing relays and interface panels required to install the master SCADA station and remote terminal units.

As lead engineer, provided a technical review of routing alternatives and recommended a preferred alternative for the 230-kV Westley-Tracy transmission line proposed jointly by the Turlock and Modesto Irrigation Districts in California. The project included construction of a 29.5 mile, single-circuit 230-kV line linking the Westley switchyard and Tracy substation and construction of a 230-kV switchyard, which enabled the two districts to fully use their shares of a 500-kV intertie between California and Oregon. Also prepared a preliminary design for the switching station and specifications for the procurement of steel for the new tower.

As lead engineer, reviewed design plans for the 115-kV Quartz Hill-Keswick transmission loop to confirm constructability of the 8.8-mile line. The city of Redding, California, had proposed construction of the 115-kV line with 12-kV underbuild to provide back-up to existing electrical facilities, improve service to newly developed areas, and to meet future growth.

Managed the layout and design of a redundant microwave communications system to provide voice communication, relaying protection, remedial action, and control for the 500-kV California-Oregon Transmission Project. Spanning 340 miles, the line stretches from southern Oregon through northern California to just east of the San Francisco Bay area. It was built by a consortium of California utilities under the leadership of the Transmission Agency of Northern California and with the strong support of the Western Area Power Administration.

As project manager, provided executive oversight of the successful changeover and implementation of electric operations and maintenance management for the Vernon Electric Department in southern California. Recruited utility manager and personnel for new operations, negotiated a contract with the International Brotherhood of Electrical Workers, established a worker safety program, and implemented a state-of-the-art metering facility. Prepared an operating budget and operating procedures, procured equipment and vehicles, establish an initial material supply, and helped design the utility office, yard, and warehouse. Continue to provide oversight of the operations.

As executive-in-charge, managed implementation of a new operation and maintenance program for the municipal electric utility in the city of Needles, California. Recruited utility manager and staff, prepared an operating budget, and developed policies, procedures, and electric rates. Acquired operating equipment and vehicles, procured initial material supply, and helped design the utility office, yard, and warehouse. Also managed the utility during its start-up phase and initial operation.

Managed a wood pole inspection and treatment program for the Boulder City area office of the Western Area Power Administration. Prepared specifications and bids annually for four years until the 20,000 poles in the federal agency's system had been inspected and treated. The specifications called for boring and ground line treatment of each acceptable pole (unsatisfactory poles were placed on a replacement list) as a way to lengthen the life of those poles.

Provided technical expertise to field crews responsible for the operations and maintenance of transmission and distribution facilities operated by the U.S. Bureau of Reclamation and later the Western Area Power Administration. Coordinated a range of activities that included the switching of high-voltage facilities to provide clearances, the scheduling of power, and routing and emergency maintenance and repairs of federal power facilities.

As project managing director, managed and participated in the development and implementation of a public involvement program for the high-profile California-Oregon Transmission Project. The program included a series of scoping meetings, public information forums and formal hearings, augmented by newsletters and other print material, to provide opportunities for interest groups to express their views and influence the planning process. Energized in 1993, the 500-kV line stretches 340 miles from southern Oregon through northern California to just east of the San Francisco Bay area.

As deputy area manager, prepared power availability studies and power marketing criteria for the Boulder City office of the Western Area Power Administration. The study results were used to develop and negotiate power marketing and facility use contracts with the federal agency's wholesale energy customers.

As project managing director, represented the Transmission Agency of Northern California (TANC) in negotiations of a \$10-million construction contract with Pacific Gas & Electric Company to interconnect the 500-kV California-Oregon Transmission Project to the region's existing network of high-voltage lines linking California and the Pacific Northwest. Administered the contract during construction of the interconnecting facilities. The California-Oregon Transmission Project was built by a consortium of utilities in California under the direction of TANC to take greater advantage of the diversity in loads and resources between California and the Northwest.

Represented the U.S. Bureau of Reclamation and the Western Area Power Administration in negotiations of facilities use and facilities modification contracts with wholesale power customers. The negotiated agreements governed such issues as new taps and transformers, additional delivery points, and wheeling services over the federal transmission system.

As project managing director, represented the Transmission Agency of Northern California in negotiations of contracts for developing the 500-kV California-Oregon Transmission Project.

Negotiated contracts governing the preparation of system studies, material procurement and construction and administered the contracts to ensure compliance. The 340-mile long transmission line was placed into commercial operation in early 1993 after nearly a decade of detailed planning, study, public review and subsequent construction.

As project managing director, was responsible for a wide range of system planning analyses to support development of the California-Oregon Transmission Project. The 340-mile long, 500-kV transmission system was developed by a consortium of municipal utilities under the leadership of the Transmission Agency of Northern California and with the support of the Western Area Power Administration for the purpose of linking the generating facilities of California with those of the Pacific Northwest. Verified power flow, stability, fault duty, facility and equipment requirements, and remedial action schemes. Coordinated planning process with all participating utilities and the architect/engineer under contract. Oversaw preparation and issuance of material specifications (e.g., stub angles, tower steel, shield wire, conductor, insulators, and hardware) and construction specifications, bid receipt and analysis, award of supply and construction contracts, and receipt and payment of services.

As project managing director, provided executive oversight of construction activities for a 340-mile long, 500-kV transmission line linking California and Oregon. The California-Oregon Transmission Project was completed and placed into commercial operation in 1993 after nearly a decade of detailed planning, study and public review. Managed team of consultants charged with preparing the design criteria and specifications for clearing vegetation and constructing access roads and the transmission system. Oversaw development of construction schedule and budget, the issuance of bid documents, the review of bid responses, and the award of contracts. Participated in negotiating final contracts and administering those contracts.

PROFESSIONAL MEMBERSHIPS

Institute of Electrical and Electronics Engineers

RONALD V. STASSI

Ronald Stassi is a Managing Director with Resource Management International, Inc. (RMI), working out of RMI's Southern California regional office.

Prior to joining RMI, Mr. Stassi spent over 30 years with several Southern California municipal utilities, mostly in a supervisory or management role. Immediately prior to joining RMI, Mr. Stassi served nearly eleven years as General Manager of the City of Burbank's Public Service Department, a municipal electric and water utility located in Southern California. As the General Manager, Mr. Stassi was responsible for all aspects of the utility activities including operations, capital programs, financial planning and rate requirements. Mr. Stassi reported to the City Manager and an Advisory Board to the City Council. He oversaw the work of approximately 300 employees. Mr. Stassi had previously worked for the Burbank utility as Principal Electrical Engineer, where he was responsible for all electric design activities of the utility including transmission, distribution and substations. Mr. Stassi also worked as a Power Management Director for the City of Glendale Public Service Department where he was responsible for all power production activities including operation of the local power plant units, negotiating and administering power contracts and overseeing fuel acquisition, as well as responsibility for generation rates.

Mr. Stassi's earlier assignments included both electric station and high voltage transmission design.

EDUCATION

B.S. Electrical Engineering
San Jose State University, San Jose, California

M.S. Electrical Engineering
University of Southern California, Los Angeles, California

M.B.A. Graduate School of Business Administration
University of Southern California, Los Angeles, California

**PROFESSIONAL
HISTORY**

Resource Management International, Inc.
Glendale, California -
-Managing Director

City of Burbank, Public Service Department
Burbank, California
-General Manager

City of Glendale, Public Service Department
Glendale, California
-Power Resources Manager

City of Burbank, Public Service Department
Burbank, California
-Principal Electrical Engineer

City of Pasadena, Water and Power Department
Pasadena, California
-Electrical Engineer

City of Los Angeles, Department of Water and Power
Los Angeles, California
-Electrical Engineering Associate
-Electrical Engineering Assistant

Adjunct Professor (part time), California State College,
Los Angeles, Electrical and Computer Engineering
Department, 1982-1984

Faculty-in-residence, American Public Power Association,
University of Wisconsin, Summer 1995 Session

**REPRESENTATIVE
PROJECT
EXPERIENCE**

- Developed, presented and obtained City Council approval of a Comprehensive Competitiveness Transition Plan to competitively position the electric utility to succeed in a deregulated environment.
- Negotiated long-term power purchase contracts (including early termination in response to changes in the electric utility industry).
- Directed and participated in cost of service study for electric rate making purposes, and designed and implemented rate schedules for water, electricity and communication services.
- Conducted power supply studies to determine optimal mix of local/self generation and power purchases.
- Prepared and presented annual budgets for electric and water utilities over a period of ten fiscal years, including sales forecasts, revenue requirements, capital improvements, structure and cost configuration of electric and water rates.
- Participated in numerous workshops, planning and strategy sessions, and conferences related to electric industry restructuring

**PROFESSIONAL
MEMBERSHIPS**

Served as president of the Southern California Public Power Authority (SCAPPA), 1992-1994, and Board member from 1988-1998.

Secretary of California Municipal Utilities Association, 1993-1998.

Professional Engineer in Electrical Engineering in the State of California, Certificate 7097, 1968 - present.

Institute of Electrical and Electronic Engineers

Burbank Sunrise Kiwanis Club

PUBLICATIONS

Use of Pre-Molded Splices at 34.5 kV for Bulk Power Transmission, Undergrounding: The Journal of Underground Power Transmission, Volume 2, No. 3, May/June 1973.

DANIEL H. McENTIRE

Mr. McEntire is a Division Manager for RMI Utility Services. He has 25 years of experience in management and field administration within the utility industry, and 10 years in all phases of transmission line construction. He has extensive experience managing line crews for electric utilities and electrical contractors involved in transmission and distribution construction and maintenance. He possesses a strong working knowledge of utility class electric equipment and associated applications. Mr. McEntire has served in key committee leadership roles to establish and modify the electric utility industry, state and federal codes, and safety regulations.

EDUCATION

Business Courses
Consumnes River College, Sacramento, California

Safety Program Auditing Certificate
International Loss Control Institute of Atlanta, Georgia

Project Planning & Control Certificate
Decision Planning Corporation

**PROFESSIONAL
HISTORY**

RMI Utility Services
Vernon, California
Division Manager

Sacramento Municipal Utilities District

- Superintendent, Service Center
- Superintendent, Construction Services Division
- Superintendent, Safety and Codes
- Assistant Line Superintendent
- Line Crew Foreman

All Phases of Line Construction with Various Electrical Contractors

- Field Superintendent
- General Superintendent
- Heavy Line Crew Foreman
- Lineman

**REPRESENTATIVE
PROJECT
EXPERIENCE**

Responsible for the construction and maintenance of a municipal electrical system involving substations, overhead and underground conductors and associated equipment for the City of Vernon, California. Supervises 10-20 employees whose responsibilities include design, operation, maintenance, emergency system repairs, and purchasing of warehousing material, tools and equipment. Develops work procedures and administers training programs to ensure maximum productivity and high quality work. Provides reliable electrical service to the City's customers through maintenance programs dealing with overhead and underground facilities.

As an employee of Sacramento Municipal Utilities District (SMUD), managed a 125-person electric utility service center responsible for construction and maintenance of overhead and underground distribution and transmission facilities.

As an employee of Sacramento Municipal Utilities District (SMUD), served as superintendent for a large scale construction and rebuild of overhead and underground line facilities. Representative projects include:

Distribution System Conversion, Construction and Maintenance, Relocation and Re-conductoring

- Supervised the conversion of distribution systems including 4-kV to 21-kV midtown/alley constructions, 4-kV to 12-kV residential
- Major roadway and freeway relocation projects
- Determined segments of work for progressive change over, define clearances and hot work, schedule crews and equipment and provide for special instruction as needed
- Coordinated overall logistics through subordinate supervisors and assured compliance with construction standards, and compliance with federal, state and local requirements
- Supervised maintenance of distribution system

Transmission Line Construction

- Supervised transmission line construction for storm damage and major substation interconnects
- Analyzed designs and evaluated feasibility and compliance
- Developed logistics for equipment (trucks, cranes, booms), materials, personnel and site access
- Identified and developed procedures for unique safety and training needs
- Scheduled and oversaw the construction through subordinate supervisors, and resolved major problems as they arose

Maintenance and Repair of Transmission Lines

- Supervised periodic patrol of installations and scheduled preventive maintenance and right-of-way clearances
- Developed contingency plans to respond to failures or damages
- Provided specialized training
- Coordinated with Forest Service and local agencies to negotiate access, clearances and compliance parameters

Supervised and coordinated an apprentice lineman training program including technical, safety, shoring, and rigging.

Developed and implemented an effective electric utility accident prevention program.

**PROFESSIONAL
MEMBERSHIPS**

Served as a member of California Occupational Safety & Health Administration High Voltage Electrical Safety Orders Advisory Committee.

Founding member of the California P.U.C. General Orders 95 & 128 Rules Review Committee and served as executive board member and subcommittee chairperson.

SECTION 5

PROJECT BUDGET SCHEDULE

PROJECT BUDGET

RMI can perform the work as outlined in the Work Scope on a fixed fee basis for \$121,000, or on an individual task basis as priced below.

SCHEDULE

Based upon RMI's understanding of the Work Scope as described in this proposal, RMI is prepared to begin work on the project upon authorization. The work plans presented below identify the proposed task schedules. Each task will have a deliverable, generally in the form of a written report. Such deliverables are denoted by "D" in the schedule below

TASK	WEEKS															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Maintenance							D									
2. Operations							D									
3. Staffing							D									
4. Drawings																D
5. Training									D							
6. Inventories								D								
7. Security								D								
8. Year 2000						D										
9. Integration								D								

RMI proposes to work closely with the City's management team to ensure that the Tasks described in the Work Scope are completed to the City's satisfaction. If at any time Lodi Electric is dissatisfied with the performance of RMI, It has the right to terminate the project.

RESOLUTION NO. 99-145

A RESOLUTION OF THE LODI CITY COUNCIL APPROVING THE
PROFESSIONAL SERVICES AGREEMENT WITH RESOURCE
MANAGEMENT INTERNATIONAL, INC. (RMI) FOR ELECTRIC
DISTRIBUTION SYSTEM ASSISTANCE

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BE IT RESOLVED, that the Lodi City Council hereby approves the Professional Services Agreement with Resource Management International, Inc. for Electric Distribution System Assistance; and

BE IT FURTHER RESOLVED, that the City Manager is hereby authorized to execute this Agreement on behalf of the City of Lodi.

Dated: September 15, 1999

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I hereby certify that Resolution No. 99-145 was passed and adopted by the Lodi City Council in a regular meeting held September 15, 1999 by the following vote:

AYES: COUNCIL MEMBERS – Mann, Nakanishi and Land (Mayor)

NOES: COUNCIL MEMBERS – None

ABSENT: COUNCIL MEMBERS – Hitchcock

ABSTAIN: COUNCIL MEMBERS – Pennino


ALICE M. REIMCHE
City Clerk